

ABSTRACT OF THE DISCLOSURE

Disclosed are a filament cassette and a filament loading assembly for supplying filament in a three-dimensional deposition modeling machine. The filament cassette contains a rotatable spool of filament, and has an exit orifice through which a filament strand may exit the cassette. The filament loading assembly is mounted on the modeling machine and receives the filament cassette. The filament loading assembly has a conduit for receiving a strand of filament from the cassette and a drive means for advancing the filament strand through the conduit. The filament cassette and loading assembly of the present invention provide a convenient manner of loading and unloading filament from the modeling machine. The filament cassette and the conduit may be made airtight so that the filament is protected from moisture in the environment.